

Technologies in Transition:
Exploring the expansion of accessibility of otherwise inaccessible technologies

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Technological development to meet the needs of any one group or idea often implicitly excludes anyone outside the purview of design, with barriers stemming from economic, political, physical, and educational factors. As such, any question of accessibility is simultaneously a question of intended user base, of who is included and thereby excluded. However, a shift in usage or design toward previously excluded users marks a transition toward accessibility. Newfound accessibility can come from diverse forces pushing for change, such as government, non-government, or corporate intervention; as well as through users themselves via hacking, user groups, and/or expanding knowledge bases.

This panel will explore attempts at broader access for technological adoption, both successes and failures. Such attempts may include the development of technical features toward inclusivity or economic, political, and social actors aligning with and accelerating adoption. Panelists may examine how various groups shaped technologies, intending and allowing for a wider spectrum of users to expand access and grow user bases. For example, the first electronic spreadsheet software for the microcomputer, VisiCalc, is often described as revolutionizing the personal computer due to its accessible interface. While indeed more mobile and user-friendly than prior database programs, VisiCalc also aligned with a growing financial sector, made more viable due to the deregulation of financial markets. Thus, the push toward accessibility was not simply due to ‘rational’ design, but rather the desire to further financial computing power.

On the other side of the Iron Curtain, personal computers were the preeminent utopian signifiers of late East German communist rhetoric. Although VEB Kombinat Robotron did indeed produce personal computers, they were largely unavailable to the general populace. Their production was costly, their political implications carefully managed, and their use restricted to approved academies. In their stead, state-run enterprises produced computer toys such as the PIKOdat, PIKOtron, and Kybernet to both generate interest in personal computing and foster the skills necessary for a potential career in engineering. These toys were created to fill the gap between rhetorical promise and actual accessibility. As such, the state sought to work against its own inaccessibilities in order to push for a technological future at the forefront of computer design.

While both examples here have focused on computing, we welcome studies of inaccessibility/accessibility of any sort of technology. This panel hopes to include technologies in transition – the examination of design intentions, user applications, and the social, political, and economic forces shaping adoption. In doing so, the work here will continue the recent trend within the history of technology, exploring the “hidden” actors and elements of technological development influencing access.

Some other potential topics include:

- Educational methods for increasing access, such as expanding STEM development for marginalized groups

- Successes and failures of attempts at access, such as technology that directly included or indirectly excluded groups along race, gender, (dis)ability, sexuality, etc.
- Killer application histories. Killer applications are those of new technologies or products seen as indispensable or superior to those before
- Projects (attempts and failures) to disseminate technologies to developing countries

Please submit a CV and abstract (250-500 words) via email to both Kera Allen (kera.allen@gatech.edu) and Mario Bianchini (mbianchini6@gatech.edu) by March 25th, 2019.